



▶ ILO Monitor: COVID-19 and the world of work. Fifth edition Updated estimates and analysis

30 June 2020

Key messages

Looking back: Labour market disruptions in the first half of 2020

Workplace closures

- ▶ **The vast majority, namely, 93 per cent, of the world's workers continue to reside in countries with some sort of workplace closure measure in place.** This global share has remained relatively stable since mid-March, but with a marked shift towards softer measures. Currently, the Americas is experiencing the highest level of restrictions on workers and workplaces.

Working-hour losses: Much larger than previously estimated

- ▶ **The latest ILO estimates show that working-hour losses have worsened during the first half of 2020, reflecting the deteriorating situation in recent weeks, especially in developing countries.** During the first quarter of the year, an estimated 5.4 per cent of global working hours (equivalent to 155 million full-time jobs) were lost relative to the fourth quarter of 2019. Working-hour losses for the second quarter of 2020 relative to the last quarter of 2019 are estimated to reach 14.0 per cent worldwide (equivalent to 400 million full-time jobs), with the largest reduction (18.3 per cent) occurring in the Americas.
- ▶ **The factors driving the decline in working hours vary considerably across the countries for which relevant data are available.** In some countries, shorter working hours and “being employed but not working” (e.g. where workers are put on temporary leave) contributed significantly to the decline, while in others, the main driving factor was people being pushed into unemployment and inactivity. These variations suggest that a narrow focus on unemployment does not allow a proper assessment of the pandemic's impact on the labour market.

With disproportionate impact on women workers

- ▶ **Since the COVID-19 crisis is disproportionately affecting women workers in many ways, there is a risk of losing some of the gains made in recent decades and exacerbating gender inequalities in the labour market.** In contrast to previous crises, women's employment is at greater risk than men's, particularly owing to the impact of the downturn on the service sector. At the same time, women account for a large proportion of workers in front-line occupations, especially in the health and social care sectors. Moreover, the increased burden of unpaid care brought by the crisis affects women more than men.

Looking ahead: Outlook and policy challenges

Outlook for the second half of 2020

- ▶ **ILO projections suggest that the labour market recovery during the second half of 2020 will be uncertain and incomplete.** In the baseline scenario, working-hour losses are likely to still be in the order of 4.9 per cent (equivalent to 140 million full-time jobs) in the fourth quarter of the year. However, under the pessimistic scenario, which assumes a second wave of the pandemic in the second half of 2020, working-hour losses would be as high as 11.9 per cent (equivalent to 340 million full-time jobs) in the last quarter. Even in the optimistic scenario, which assumes a fast recovery, global working hours are unlikely to return to the pre-crisis level by the end of 2020.

Policies for a job-rich recovery

- ▶ **The actual labour market outcomes in the remainder of 2020 will be shaped by policy choices and actions as well as by the pandemic's**

future trajectory. To date, most countries have deployed resources on an unprecedented scale to boost the economy and employment through fiscal, monetary, social protection and other policies. Yet, fiscal space is limited particularly in a number of low- and middle-income countries.

- **Moving to a job-rich recovery will require addressing key challenges**, including (a) finding the right policy balance; (b) sustaining interventions on the necessary scale; (c) supporting vulnerable

and hard-hit groups and generating fairer labour market outcomes; (d) securing international solidarity and support; and (e) strengthening social dialogue and respect for rights at work. An important reference for tackling these challenges is provided in the ILO Centenary Declaration for the Future of Work (2019), which sets out a human-centred approach for increasing investment in people’s capabilities, in the institutions of work, and in decent and sustainable jobs for the future.

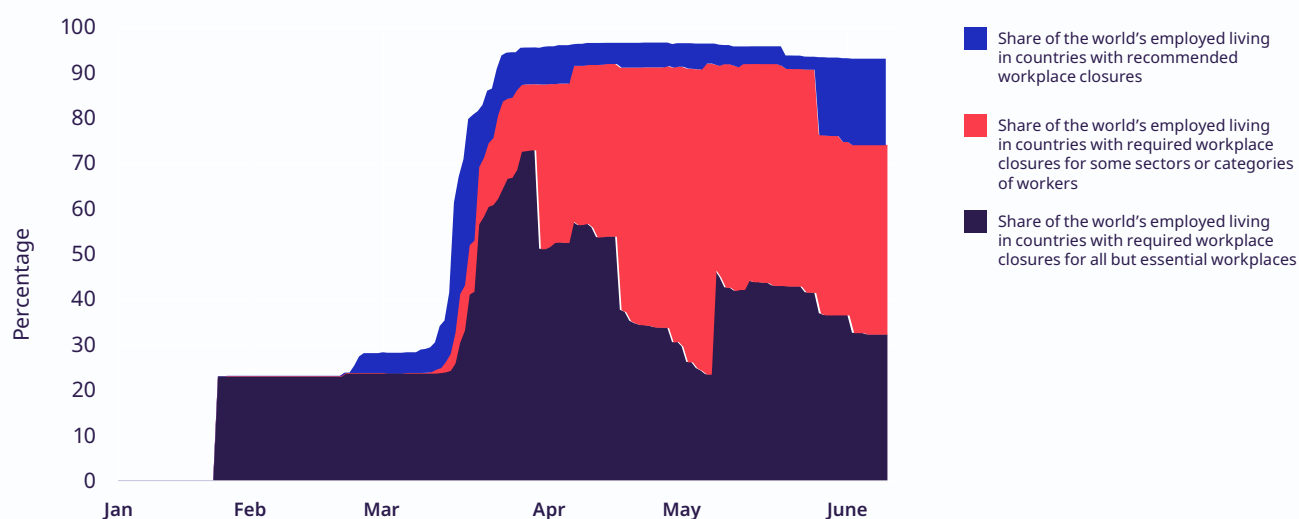
► Part I. Looking back: Labour market disruptions in the first half of 2020 – An unprecedented scale of global disruption

1. Workplace closures

The world of work has been impacted severely by the imposition of lockdown measures, which include various forms of workplace closures. As at 15 June, almost one third of the world’s workers

(32 per cent) were living in countries with required workplace closures for all but essential workplaces. An additional 42 per cent were living in countries with required workplace closures for some sectors or categories of workers, and a further 19 per cent in countries with recommended workplace closures (figure 1).

► **Figure 1. Share of world’s employed in countries with workplace closures, 1 January–15 June 2020 (percentage)**



Note: The shares of workers in countries with required workplace closures for some sectors or categories of workers and countries with recommended workplace closures are stacked on top of the share of workers in countries with required workplace closures for all but essential workplaces.

Source: ILOSTAT database, ILO modelled estimates, November 2019; Oxford COVID-19 Government Response Tracker.

Taken together, the vast majority, namely, 93 per cent, of the world's workers continue to reside in countries with workplace closure measures of some kind still in force. This global share has remained relatively stable since mid-March, though there has been a marked shift towards softer measures. For instance, the proportion of workers in countries with the strictest form of workplace closure peaked at around 70 per cent in late March and subsequently declined to 32 per cent in mid-June.

There are significant variations in workplace closures across regions. The region currently most affected by restrictions on workers and workplaces is the **Americas**. In contrast, as at 15 June, no country in either the **Arab States** or **Europe and Central Asia** still stipulated the closure of all but essential workplaces, while in **Africa** only 2 per cent of workers were still living in countries with such stringent requirements (figure 2).

Nevertheless, even in countries where required workplace closures are not currently widespread, **many businesses remain unable to restore operations to full capacity.** As at 15 June, all countries in the **Arab States** region had some workplace closure requirements in place for specific sectors or categories of workers. Overall, 81 per cent of workers in **Europe and Central Asia**, 69 per cent of workers in **Africa** and 51 per cent of workers in the **Americas** reside in countries where workplaces are required to remain closed in certain sectors or for some categories of workers.¹

Currently, the risk of new infections and a second wave remains. New lockdowns or the continuation of current strict measures over the coming months would lead to further disruption of economic activity and labour markets, thereby jeopardizing an employment recovery.

2. Working-hour losses worsening over the first half of 2020

The closure of workplaces and implementation of other containment measures, combined with the rapid deterioration of economic conditions, led to immediate and massive losses in working hours over the first half of 2020. Since its second edition (released on 7 April 2020), the *ILO Monitor* has consistently updated the estimates it presents on working-hour losses in the first and second quarters of 2020 relative to the last pre-crisis quarter (i.e. the fourth quarter of 2019).

The latest ILO estimates indicate a considerably larger decline in global working hours in the first half of 2020 than previously estimated (see Statistical annexes, figure A1). This reflects the worsening situation in many parts of the world in recent weeks. In addition, since the fourth edition of the *ILO Monitor* (released on 27 May 2020), new national labour force survey and economic data covering both the first and second quarters of 2020 have become available and have been integrated into the ILO's "nowcasting" model (see Technical Annexes 1 and 2 for further details). The new data suggest that workers in developing countries, especially those in informal employment, have been affected to a greater extent than in past crises.² In these countries, more limited opportunities for teleworking³ and the greater vulnerability of informal workers to confinement measures appear to be exacerbating the effect of the downturn and creating new labour market challenges.

First quarter of 2020

During the first quarter of 2020, an estimated 5.4 per cent of global working hours (up from 4.8 per cent as estimated previously) were lost relative to the fourth quarter of 2019, equivalent to 155 million full-time jobs (figure 3 and table 1).⁴ Given the earlier spread of the virus in China (which implemented strict containment measures already in late January) and other countries in **Asia and the Pacific**, it is not surprising that this region accounted for approximately 80 per cent of the global reduction in working hours during the first quarter of the year. More

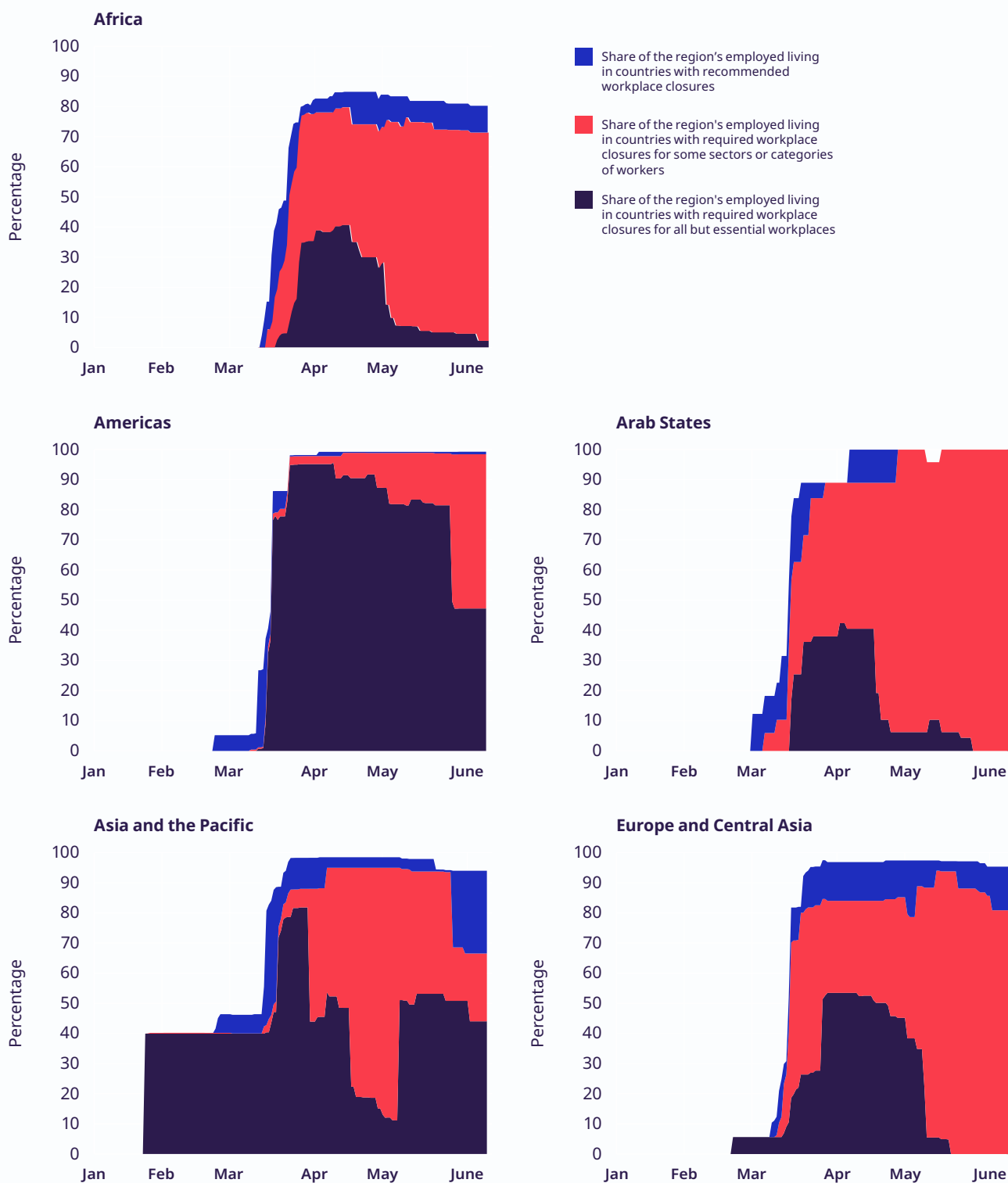
1 It should be noted that the developments shown in figure 2 for Asia and the Pacific in the second quarter of 2020 are driven mainly by the new restrictions introduced in Beijing, China. As the Oxford COVID-19 Government Response Tracker does not distinguish between restrictions affecting only certain geographical areas of a country and restrictions affecting the entire country, the level of required workplace closures in most countries in Asia and the Pacific remains well below that shown in figure 2.

2 There is evidence that informal employment has increased in the past during economic downturns as a result of declining opportunities in the formal economy. See e.g. Johannes P. Jütting and Juan R. de Laiglesia (eds), *Is Informal Normal? Towards More and Better Jobs in Developing Countries* (Paris: OECD, 2009).

3 See Mariya Brussevich, Era Dabla-Norris and Salma Khalid, "[Who Will Bear the Brunt of Lockdown Policies? Evidence from Tele-workability Measures across Countries](#)", IMF Working Paper No. 20/88, 2020.

4 See the note to table 1 further down for more details on the use of full-time equivalent jobs in these estimates.

► **Figure 2. Share of world’s employed in countries with workplace closures, by region, 1 January–15 June 2020 (percentage)**



Note: The shares of workers in countries with required workplace closures for some sectors or categories of workers and countries with recommended workplace closures are stacked on top of the share of workers in countries with required workplace closures for all but essential workplaces.

Source: ILOSTAT database, ILO modelled estimates, November 2019; Oxford COVID-19 Government Response Tracker.

► **Figure 3. Working-hour losses, world and by income group, first and second quarters of 2020 (percentage)**



Source: ILO nowcasting model (see Technical Annex 1).

specifically, the Eastern Asia subregion experienced a decline in working hours of 11.6 per cent, or 95 million full-time equivalent (FTE) jobs, in the first quarter.

However, as the pandemic began to spread globally, significant losses in working hours were observed in other regions. **Europe and Central Asia** experienced a reduction in hours in the first quarter of 2020 of 3.4 per cent, or 11 million FTE jobs, with the largest losses occurring in Southern Europe (5.3 per cent) and Western Europe (4 per cent). Some 11 million FTE jobs were lost in the **Americas** during the first quarter of the year, with the biggest impact felt in South America, where working hours declined by 4.8 per cent relative to the fourth quarter of 2019. In **Africa**, the working-hour losses in the first quarter of 2020 are estimated at 2.4 per cent, or 9 million FTE jobs.

Second quarter of 2020

Drawing on new data that suggest a larger impact than expected, particularly in developing regions, **the ILO has substantially revised upwards its estimate of global working-hour loss** in the second quarter of 2020, compared with previous estimates. The latest estimates presented in this edition of the *ILO Monitor* reveal a decline in global working hours of **14 per cent in the second quarter of 2020 (up from the previous estimate of 10.7 per cent), which is equivalent to 400 million full-time jobs**. Lower-middle-income countries are the hardest hit, experiencing a decline of 16.1 per cent.

The **Americas** is estimated to have suffered a reduction in working hours of 18.3 per cent, or 70 million FTE jobs, in the second quarter of 2020, compared with the previous estimate of 13.1 per cent. This is the highest working-hour loss among the major geographical regions and the largest upward revision since the fourth edition of the *ILO Monitor*. Within this region – and among all regions and subregions of the world – South America has the highest estimated working-hour loss in the second quarter, at 20.6 per cent. Losses for Central America and for Northern America are estimated at 19.2 and 15.3 per cent, respectively.

The hours worked in **Europe and Central Asia** are estimated to have declined by 13.9 per cent, or 45 million FTE jobs, in the second quarter, up from the estimate of 12.9 per cent presented in the previous edition of the *ILO Monitor*. The largest loss in this region is estimated to have occurred in Southern Europe (18.0 per cent), followed by Northern Europe (15.3 per cent), Western Europe (14.3 per cent), Central and Western Asia (13.6 per cent) and Eastern Europe (11.6 per cent).

In **Asia and the Pacific**, the total working-hour loss for the second quarter of 2020 is estimated at 13.5 per cent, or 235 million FTE jobs, up from the previous estimate of 10 per cent. Among the subregions, the greatest reduction in working hours is estimated to have occurred in Southern Asia (with a decline of 17.9 per cent in the second

► **Table 1. Working-hour losses, world and by region and subregion, first and second quarters of 2020 (full-time equivalent jobs and percentage)**

Reference area	2020 Q1			2020 Q2		
	Equivalent number of full-time jobs (40 hours/week) (millions)	Equivalent number of full-time jobs (48 hours/week) (millions)	Percentage hours lost (%)	Equivalent number of full-time jobs (40 hours/week) (millions)	Equivalent number of full-time jobs (48 hours/week) (millions)	Percentage hours lost (%)
World	185	155	5.4	480	400	14.0
Africa	11	9	2.4	55	45	12.1
<i>Northern Africa</i>	2	2	2.5	11	9	15.5
<i>Sub-Saharan Africa</i>	9	7	2.4	43	35	11.4
Central Africa	1	1	2.3	7	6	11.9
Eastern Africa	4	3	2.4	18	15	10.9
Southern Africa	0	0	1.6	3	2	12.2
Western Africa	3	3	2.5	15	13	11.6
Americas	13	11	3.0	80	70	18.3
<i>Latin America and the Caribbean</i>	10	9	3.6	55	47	20.0
Central America	1	1	1.1	16	13	19.2
South America	9	7	4.8	38	32	20.6
<i>Northern America</i>	3	2	1.8	25	21	15.3
Arab States	2	2	3.1	10	8	13.2
Asia and the Pacific	150	125	7.1	280	235	13.5
<i>Eastern Asia</i>	115	95	11.6	100	85	10.4
<i>South-Eastern Asia and the Pacific</i>	7	6	2.1	44	37	12.6
South-Eastern Asia	7	6	2.1	42	35	12.7
<i>Southern Asia</i>	26	21	3.4	135	110	17.9
Europe and Central Asia	13	11	3.4	55	45	13.9
<i>Northern, Southern and Western Europe</i>	8	6	4.2	29	24	15.7
Northern Europe	1	1	3.1	7	6	15.3
Southern Europe	3	3	5.3	10	9	18.0
Western Europe	3	3	4.0	12	10	14.3
<i>Eastern Europe</i>	3	3	2.6	15	12	11.6
<i>Central and Western Asia</i>	2	2	2.7	10	8	13.6

Note: Values of full-time equivalent (FTE) jobs lost above 50 million are rounded to the nearest 5 million; values below that threshold are rounded to the nearest million. The equivalent losses in full-time jobs are presented to illustrate the magnitude of the estimates of hours lost. The FTE values are calculated on the assumption that reductions in working hours were borne exclusively and exhaustively by a subset of full-time workers, and that the rest of workers did not experience any reduction in hours worked. The figures in this table should not be interpreted as numbers of jobs actually lost or as actual increases in unemployment.

Source: ILO nowcasting model, see Technical Annex 1.

quarter),⁵ followed by South-Eastern Asia and the Pacific (12.6 per cent) and Eastern Asia (10.4 per cent).

Working hours in the second quarter of 2020 are estimated to have declined by 13.2 per cent, or 8 million FTE jobs, in the **Arab States**, an upward revision of 2.9 percentage points from the estimates presented in the previous edition of the *ILO Monitor*.

In **Africa**, the total working-hour loss in the second quarter of the year is estimated at 12.1 per cent, or 45 million FTE jobs, up from the previous estimate of 9.5 per cent. In terms of subregions,⁶ estimates for working-hour losses in the second quarter of 2020 indicate that Northern Africa experienced the sharpest decline (15.5 per cent), followed by Southern Africa (12.2 per cent), Central Africa (11.9 per cent), Western Africa (11.6 per cent) and Eastern Africa (10.9 per cent).

3. A closer look at working-hour losses

Working-hour losses, as estimated using the ILO nowcasting model (see Technical Annex 1), are an aggregate indicator of the labour market impact of the COVID-19 crisis. The factors driving these losses **depend on country-specific labour market outcomes during the pandemic, which have, in turn, policy implications for the recovery process**. To identify the key mechanisms behind the impact of the crisis, working-hour losses may be decomposed into four components:

1. Shorter hours: a drop in average weekly hours worked compared to the pre-crisis situation;
2. Being employed but not working: workers remain attached to their existing jobs but do not engage in any work at all. They are employed but not at work or temporarily absent from work (e.g. furloughed workers and workers on sick leave).
3. Unemployment: being available for and seeking employment;
4. Inactivity: withdrawal from the labour force.⁷

Considerable differences in the composition of working-hour losses exist between countries (see Technical Annex 3 for more details on the data and methodology).⁸ As figure 4 shows, the loss in working hours occurred in different ways – at least in the initial stages of the COVID-19 crisis – mainly as a result of the labour market institutions in place and the political decisions made. For example, in the Republic of Korea and the United Kingdom of Great Britain and Northern Ireland, working-hour losses were overwhelmingly caused by shorter hours and by people being employed but not working. These two types of arrangement preserve the attachment of workers to their current jobs, thereby reducing the risk of a disruption to their labour market trajectories in the medium term. In both countries, the contribution of unemployment to the reduction in working hours was very small, though inactivity rose significantly in the Republic of Korea. As for Peru and Mexico, where strict containment measures were introduced, changes in unemployment were also small. In Mexico, the contribution of shorter hours and of people being employed but not working stands at roughly half of the hours lost, while the other half is due to inactivity; unemployment plays a modest role. In Peru, roughly 90 per cent of the fall in hours was driven by job loss leading to inactivity, with no contribution by unemployment. Canada experienced substantial job losses, leading to an increase in both unemployment and inactivity. Finally, in the United States of America, job losses accounted for roughly two thirds of the decline in working hours,⁹ with unemployment responsible for almost half of that decline.

The decomposition of working-hour losses shows that a narrow focus on unemployment does not allow one to gauge the full impact of the COVID-19 crisis on the labour market. In addition, the difference between inactivity and unemployment has been blurred by the crisis, since searching for a job and being available to take on a new job – both criteria that must be met to qualify as unemployed – are often prevented by lockdown measures, causing many “unemployed” to be considered as “inactive”.¹⁰

5 The availability of data for this subregion is limited: the above estimate is therefore subject to a higher level of uncertainty than those for other subregions.

6 The availability of data for Africa is limited: the estimates for the region as a whole and for its subregions are therefore subject to a higher level of uncertainty than those for other regions.

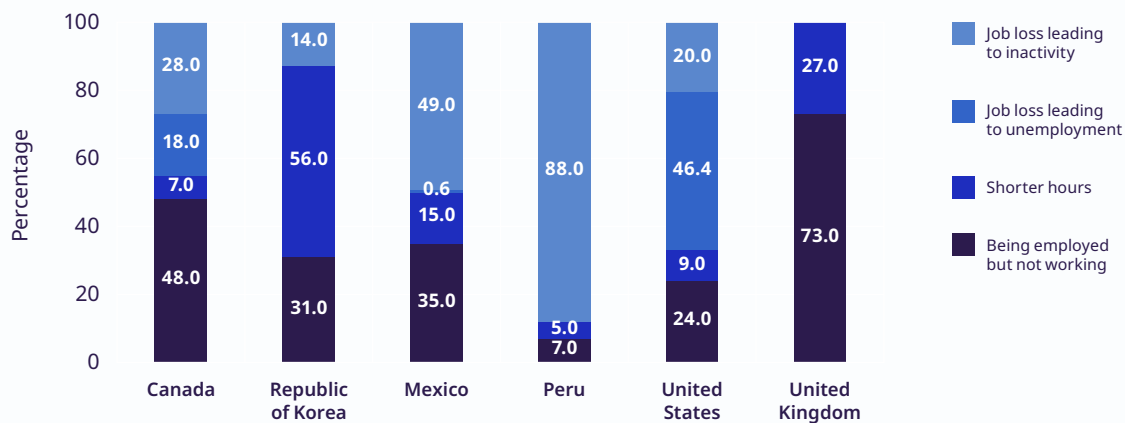
7 The difference between unemployment and inactivity as defined in the current analysis is based on the actions taken by individuals as described in their responses to a labour force or similar household survey (with availability to work and searching for a job being the two criteria used to classify someone as “unemployed”). Critically, this status does not reflect whether someone is eligible for unemployment insurance, COVID-19 relief or other social protection measures.

8 The decomposition presented here is based on data from April 2020, which has been selected as the period of reference for six countries for which suitable information is available. The exception is the United Kingdom, for which data from the last week of March are used because April data are not yet available.

9 See note 2 to figure 4. The values for the two job loss categories presented for the United States can be considered as a lower-bound estimate of the actual effect.

10 With regard to the different labour market implications of the two concepts, it would be correct to say that the inactive population is less attached to the labour market than the unemployed population.

► **Figure 4. Decomposition of working-hour losses, selected countries, March–April 2020 (percentage)**



Notes: (1) The data for Peru refer only to Lima and its metropolitan area. (2) The US Bureau of Labour Statistics (BLS) has suggested in guidance documents* for April and May 2020 that the usual labour force survey algorithm is likely to understate the number of persons in unemployment (by classifying them in the group “employed but not working”). For the current analysis, we take the employment/unemployment definition of the BLS; hence, the likely underestimation also affects the results for the United States presented above. Regardless of labour market status, the social impact of the COVID-19 crisis on those identified by the BLS survey as belonging to the “employed but not working” group is likely to be substantial: two thirds of those workers report not being paid during their absence from work.

* BLS, “[Frequently Asked Questions: The Impact of the Coronavirus \(COVID-19\) Pandemic on the Employment Situation for April 2020](#)”, 8 May 2020; BLS, “[Frequently Asked Questions: The Impact of the Coronavirus \(COVID-19\) Pandemic on the Employment Situation for May 2020](#)”, 5 June 2020.

4. Disproportionate impact on women: The COVID-19 crisis threatens to undo some of the recent gains in gender equality

The massive labour market disruptions caused by the pandemic affect all categories of workers, but some groups have been hit particularly hard. Previous editions of the *ILO Monitor* have highlighted the impact of the crisis on informal workers and young workers. The latest labour force survey data reveal alarming trends that threaten to exacerbate existing disparities and eliminate the modest gains achieved in recent years in terms of gender equality in the labour market.¹¹

Despite some progress over previous decades, gender gaps were still considerable and persistent in labour markets around the world before the

onset of the crisis. Gender gaps in labour force participation rates narrowed slightly over recent decades, but the global gap was still estimated at 27 percentage points in 2019.¹² In low- and lower-middle-income countries, where up to 90 per cent of the employed are informal, women typically have lower social protection coverage.¹³ Among wage workers, gender pay gaps persist at around 20 per cent globally.¹⁴

Against the backdrop of gender inequalities in the labour market, the crisis is disproportionately affecting women workers in four main ways.

First, a large proportion of women work in sectors severely affected by the crisis. Globally, almost 510 million, or 40 per cent of all employed women, work in hard-hit sectors, including accommodation and food services; wholesale and retail trade; real estate, business and administrative activities; and manufacturing (figure 5).¹⁵ This compares with a share

11 See also ILO, *The COVID-19 Response: Getting Gender Equality Right for a Better Future for Women at Work*, May 2020; and ILO, *A Gender-responsive Employment Recovery: Building Back Fairer*, forthcoming.

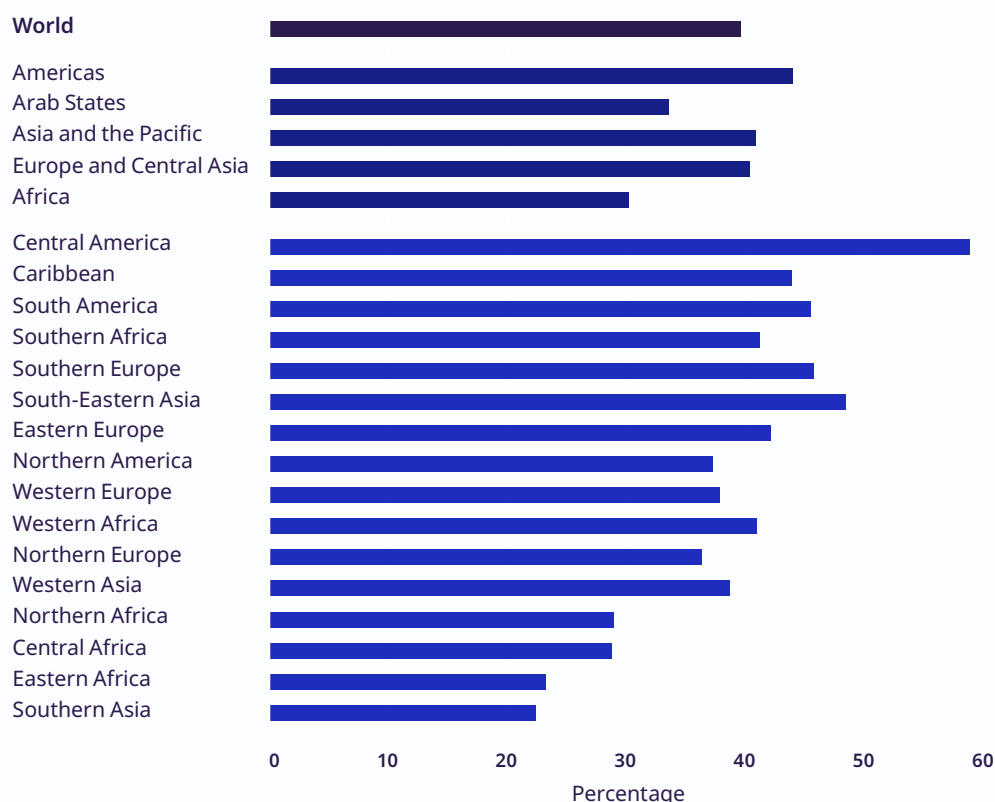
12 ILO, *World Employment and Social Outlook: Trends 2020* (Geneva, 2020), 20.

13 ILO, *COVID-19 Crisis and the Informal Economy: Immediate Responses and Policy Challenges*, May 2020.

14 ILO, *Global Wage Report 2018/19: What Lies behind Gender Pay Gaps* (Geneva, 2018), 23.

15 See ILO, *ILO Monitor: COVID-19 and the World of Work – Second Edition*, 7 April 2020.

► **Figure 5. Share of women working in sectors hit hard by the COVID-19 crisis, world and by region and subregion (percentage)**



Note: Hard-hit sectors are accommodation and food services; wholesale and retail trade; real estate, business and administrative activities; and manufacturing. See ILO, *ILO Monitor: COVID-19 and the World of Work – Third Edition*, 29 April 2020.

Source: ILOSTAT database.

of 36.6 per cent of employed men. The proportion of women working in hard-hit sectors is particularly high in Central America (58.9 per cent), South-Eastern Asia (48.5 per cent), Southern Europe (45.8 per cent) and South America (45.5 per cent). In these subregions, the share of men working in hard-hit sectors is significantly lower (43.0 per cent in Central America, 33.2 per cent in South-Eastern Asia and 42.0 per cent in South America), apart from Southern Europe, where it is higher (49.1 per cent).

With regard to certain **female-dominated sectors**, women account for 61 per cent of employment in arts and entertainment and other service workers,¹⁶ and

for 54 per cent of employment in accommodation and food services, while they are over-represented in the wholesale and retail trade sector (42.1 per cent of those employed in the sector, compared with 38.7 per cent of total workers). Beyond services, in some labour-intensive segments of manufacturing, such as garments, women are vulnerable to job losses as a consequence of disruption to supply chains and falling consumer demand.¹⁷ The gender gap in the proportion of informal workers in hard-hit sectors is far greater, with 42 per cent of women working informally in these sectors at the onset of the crisis, compared with 32 per cent of men.¹⁸

¹⁶ This share covers women working in arts and entertainment, domestic work (households as employers) and other service workers (sections R, S, T and U of the International Standard Industrial Classification of All Economic Activities (ISIC), Revision 4).

¹⁷ See e.g. ILO, *Recommendations for Garment Manufacturers on How to Address the COVID-19 Pandemic*, 15 April 2020.

¹⁸ ILO, *ILO Monitor: COVID-19 and the World of Work – Third Edition*, 29 April 2020.

Secondly, women in domestic work have been highly vulnerable to containment measures. According to ILO estimates, as at 4 June, 55 million or 72.3 per cent of domestic workers around the world were at significant risk of losing their jobs and incomes as a result of the lockdown and the lack of effective social security coverage.¹⁹ The vast majority – around 37 million – of these at-risk domestic workers are women. In all of the regions, women make up the largest proportion of domestic workers at risk, ranging from 58.2 per cent in Asia and the Pacific and 69.7 per cent in Africa, to 86.0 per cent in Europe and Central Asia and 88.5 per cent in the Americas.²⁰ Furthermore, domestic workers are often migrants, which exacerbates their vulnerability because of the general lack of social protection in destination countries, and also because they are unable to return to their home countries owing to lockdown measures and travel bans.

Thirdly, the overwhelming majority of workers in the health and social work sector are women. Globally, women represent more than 70 per cent of those employed in health and social work; in some developed regions, they account for almost 80 per cent of the health workforce. However, women in this sector tend to be engaged in lower-skilled and lower-paid jobs, which are associated with wider gender pay gaps (26 per cent in high-income countries and 29 per cent in upper-middle-income countries).²¹ Health workers, in particular those dealing with COVID-19 patients, are often subject to arduous (and sometimes dangerous) working conditions. Long working hours in intensive care units, a lack of personal protective equipment and other resources, understaffing and intense emotional stress expose health workers to higher risks of infection and transmission, especially in low- and middle-income countries.²²

Fourthly, during the crisis, the unequal distribution of increased care demands affects women disproportionately. In normal times, women provide around three quarters of all unpaid care work. The

amount of time dedicated by women to unpaid care work increases with the presence of children in the household.²³ The closures of early childhood education centres, care services and schools, along with the unavailability of older relatives to provide support, have exacerbated care demands during the crisis. The situation for single parents, 78.4 per cent of whom around the world are women,²⁴ can be even more difficult, especially if they have to juggle continuing to work (on-site or remotely) and caring for children on their own. In a recent European online survey, 10.6 per cent of female respondents (aged 35 to 49) reported that, during the crisis, family responsibilities prevented them (always or most of the time) from devoting the required time to their jobs, compared with 6.7 per cent of male respondents.²⁵ In addition to the care dimension, the ILO has also highlighted the risk of increased domestic violence during the crisis, particularly because of confinement measures.²⁶

The latest labour force survey data confirm a deteriorating employment situation for women. In countries for which data for April and May 2020 are available, the year-on-year decline in employment has been significantly higher for women than for men (figure 6). For example, in Canada, Colombia and the United States, women's employment fell by more than 16 per cent from April 2019 to April 2020. The decline continued in May.²⁷

These disproportionate impacts on women could undo some of the gains in gender equality in the labour market and exacerbate disparities. Previous crises have shown that when women lose their jobs, their engagement in unpaid care work increases, and that when jobs are scarce, women are often denied job opportunities available to men.²⁸ The bigger their losses in employment during the lockdown phase and the greater the scarcity of jobs in the aftermath of the COVID-19 crisis, the harder it will be for women's employment to recover. This crisis therefore threatens to nullify women's gains in the labour market along with the positive (albeit slow) changes in the distribution of unpaid care work.

19 ILO, *Impact of the COVID-19 Crisis on Loss of Jobs and Hours among Domestic Workers*, 15 June 2020.

20 There are not enough data to provide an estimate for the Arab States.

21 ILO, *COVID-19 and the Health Sector*, 11 April 2020.

22 ILO, *The COVID-19 Response: Getting Gender Equality Right for a Better Future for Women at Work*, May 2020.

23 ILO, *Care Work and Care Jobs for the Future of Decent Work* (Geneva, 2018), 65.

24 ILO, *Care Work and Care Jobs for the Future of Decent Work* (Geneva, 2018), 19.

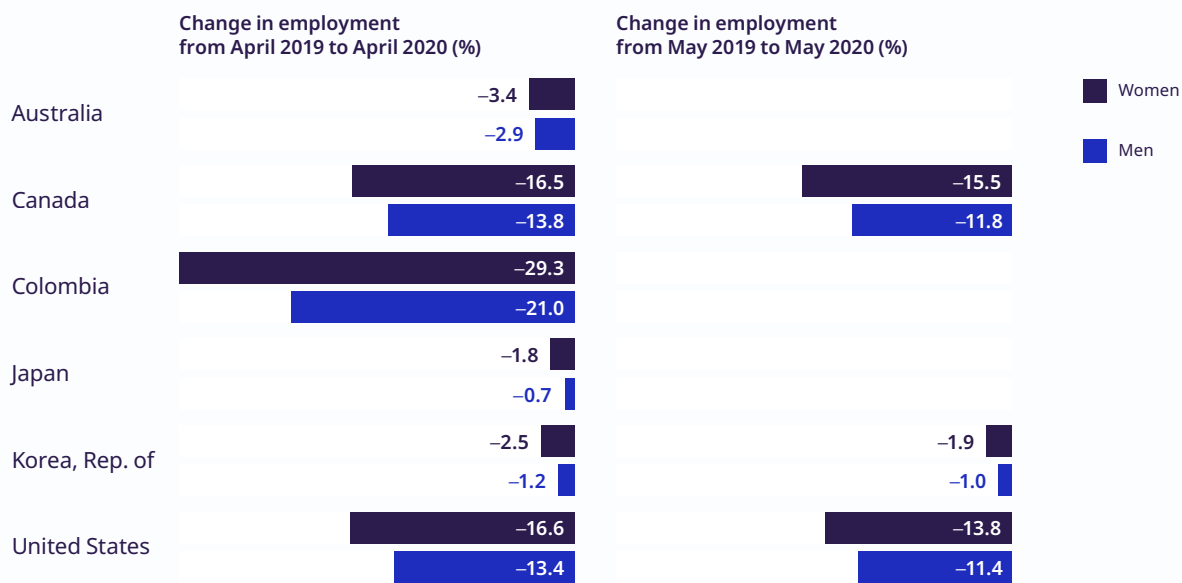
25 Figures based on respondents from the EU-27. See Eurofound, *“Living, Working and COVID-19”*, e-survey launched on 9 April 2020.

26 See ILO, *ILO Violence and Harassment Convention, 2019 (No. 190): 12 Ways It Can Support the COVID-19 Response and Recovery*, May 2020.

27 Drawing on survey data collected online, the authors of a recent study found that women in the United Kingdom and the United States had a higher probability of job loss during the crisis than men. In contrast, there was no statistical difference by gender in Germany, where the impact of the crisis on the labour market has been much more muted. See Abigail Adams-Prassl et al., *“Inequality in the Impact of the Coronavirus Shock: Evidence from Real Time Surveys”*, IZA Discussion Paper No. 13183, April 2020.

28 UNCTAD, “The Gender Dynamics of Inclusion and Exclusion: A Macro Perspective on Employment”, in UNCTAD, *Trade and Development Report 2017: Beyond Austerity – Towards a Global New Deal* (New York and Geneva, 2017), 67–92.

► **Figure 6. Change in employment for women and men (aged 15+), selected countries, year-on-year changes from April 2019 to April 2020 and from May 2019 to May 2020 (percentage)**



Source: ILOSTAT database.

► Part II. Looking ahead: Outlook and policy challenges

1. Outlook for the second half of 2020: The recovery will be uncertain and incomplete

The pandemic has caused turmoil in the labour market, with massive job and income losses in the first half of 2020. Projecting labour market outcomes for the second half of the year is a difficult task because of the lack of historical precedents that might give an indication of how quickly labour markets can recover from such a crisis. However, it is still essential to consider different potential recovery paths. To that end, the ILO has developed a model that forecasts the number of hours worked for the second half of 2020, building on the “nowcasts” of hours worked during the first half of the year (see Technical Annex 4 for further details).

Three scenarios are considered: (a) baseline; (b) optimistic; and (c) pessimistic.

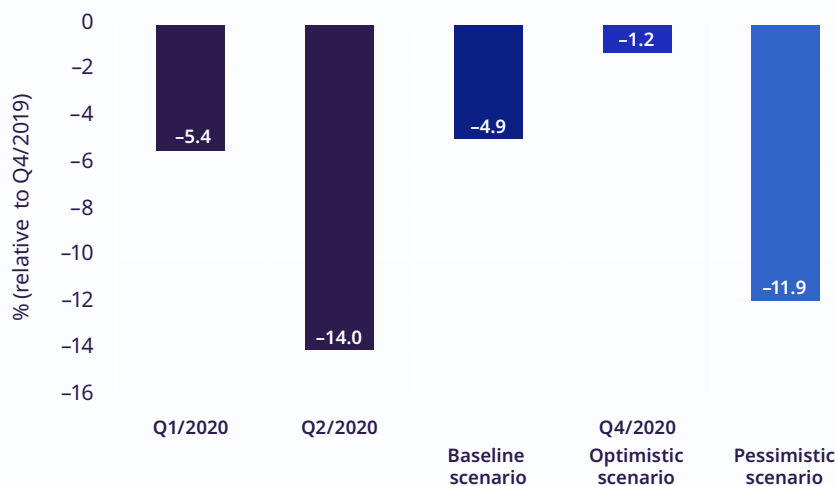
- **Baseline scenario:** This scenario uses the latest projections of gross domestic product (GDP)

growth provided by the Organisation for Economic Co-operation and Development (OECD) in the *OECD Economic Outlook* for June 2020²⁹ and by the Economist Intelligence Unit, both of which predict a significant rebound in economic activity in the second half of the year, though in 2020 as a whole there will be a significant shortfall in economic output compared with the pre-crisis period. The OECD projections assume that workplace restrictions are lifted and that consumption and investment recover to an appreciable extent.

- **Pessimistic scenario:** The pandemic causes a second wave of widespread workplace closures. GDP growth follows the second-wave scenario outlined in the *OECD Economic Outlook* for June 2020, which adjusts GDP growth downwards for the last quarter of the year.
- **Optimistic scenario:** Working hours respond faster to the output gap than the long-run trend (i.e. upper 5 per cent of the estimated distribution, instead of the mean of the distribution used in the baseline scenario).

29 OECD, *OECD Economic Outlook: June 2020*.

► **Figure 7. Projected working-hour losses in the second half (fourth quarter) of 2020, world (percentage)**



Note: See Technical Annex 4 for further details on the scenarios used to obtain these projections.

In the **baseline scenario**, the loss of global working hours (relative to the last pre-crisis quarter, i.e. the fourth quarter of 2019) would decline from the peak in the second quarter of 2020 to **4.9 per cent in the fourth quarter, or 140 million FTE jobs** (assuming a 48-hour working week) (figure 7). This means that labour markets are likely to be far from fully recovered by the end of 2020.

In the **pessimistic scenario**, the situation in the second half of 2020 would remain almost as challenging as in the second quarter. Even if one assumes better-tailored policy responses – thanks to the lessons learned throughout the first half of the year – there would still be a **global working-hour loss of 11.9 per cent at the end of 2020, or 340 million FTE jobs**, relative to the fourth quarter of 2019.

The **optimistic scenario** would push the **working-hour loss down to 34 million FTE jobs by the end of the fourth quarter of 2020, a gap of 1.2 per cent** relative to the fourth quarter of 2019.

The ILO forecasts for the second half of 2020 show large variations between regions, as was the case with the nowcasts for the first half of the year (table 2). The recovery in hours worked is projected to be fastest in Africa, a region that historically has high employment rates because of its high informality rate.³⁰ The slowest recovery, in relative terms, would be in the Americas, where the total working-hour loss by the end of the fourth quarter of 2020 is projected to range from 3 to 16 per cent.

³⁰ Given the high informality in this region, the recovery does not imply a return to better-quality (i.e. formal) jobs, only a recovery in total employment.

► **Table 2. Projected working-hour losses in the second half (fourth quarter) of 2020, by region (percentage and full-time equivalent jobs)**

	Q2 2020		Baseline scenario		Pessimistic scenario		Optimistic scenario	
	Hours lost	Equivalent number of full-time jobs (48 hours/week)	Hours lost	Equivalent number of full-time jobs (48 hours/week)	Hours lost	Equivalent number of full-time jobs (48 hours/week)	Hours lost	Equivalent number of full-time jobs (48 hours/week)
	%	millions	%	millions	%	millions	%	millions
World	14.0	400	4.9	140	11.9	340	1.2	34
Africa	12.1	45	3.5	13	10.8	40	-0.1	0
Americas	18.3	70	7.8	29	15.6	60	2.5	9
Arab States	13.2	8	3.9	2	11.9	7	-0.1	0
Asia and the Pacific	13.5	235	4.5	80	11.5	200	1.2	21
Europe and Central Asia	13.9	45	5.4	18	10.6	35	1.2	4

Notes: (1) Negative values indicate a recovery to above pre-crisis levels. (2) See Technical Annex 4 for details of the various scenarios.

2. Policy responses

Unprecedented labour market disruptions require timely and large-scale support for enterprises and workers around the world. The ILO’s policy framework for tackling the COVID-19 crisis highlights the importance of responses under four pillars (figure 8).

Actions to date: Mobilizing resources for sustaining the economy and employment

It is particularly important to mobilize resources and channel them effectively to deal with the far-reaching economic and social consequences of the pandemic and promote a job-rich recovery while ensuring that workers are protected in the workplace. Indeed, **many countries have swiftly introduced a wide range of policy measures, with a strong focus on the first and second pillars of the ILO policy framework**, that is, on stimulating the economy and employment and on supporting enterprises, jobs and incomes.

Most countries have made significant, often unprecedented efforts through fiscal and monetary policy tools to deploy resources as fast as possible with a view to preventing an outright collapse of the economy and supporting income and jobs. This has required both innovation and flexibility. In many countries, fiscal rules and legal

constraints to expansionary fiscal policy were waived in the light of the COVID-19 crisis, while central banks went well beyond their conventional role, using their balance sheets to intervene directly in the economy and buy large quantities of government and corporate bonds.

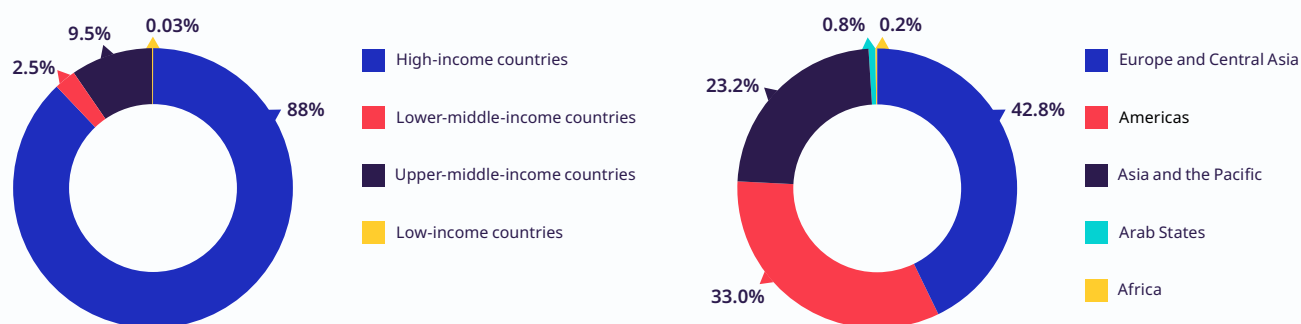
By the end of May 2020, over 90 countries had introduced or announced fiscal measures totalling over US\$10 trillion, while a similar number have cut interest rates following the outbreak.

Fiscal measures in advanced economies, averaging 5 per cent of GDP in each case, account for 88 per cent of the global fiscal stimulus (see figure 9). The specific policy mix varied across these countries, but a large part of the fiscal response took the form of deferrals and waivers of tax, social security contributions and other payments, along with the provision of grants, credit guarantees and wage subsidies to businesses (including small and medium-sized enterprises) – in some cases, these were conditional on employment retention. The bulk of discretionary spending in most advanced economies was used to expand existing social protection schemes for workers and vulnerable households (including unemployment benefits, sickness benefits and social assistance). Large-scale conventional and unconventional monetary policy measures were also introduced quickly to avert a liquidity crisis.

► **Figure 8. ILO policy framework: Four key pillars in tackling the COVID-19 crisis on the basis of international labour standards**



► **Figure 9. Global fiscal support, by income group and region, as at 8 June 2020 (percentage)**



Source: ILO calculations based on the International Monetary Fund's COVID-19 policy tracker (available at: <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>) and the Bruegel dataset "The fiscal response to the economic fallout from the coronavirus" (available at: <https://www.bruegel.org/publications/datasets/covid-national-dataset/>).

In emerging and developing economies, policy responses were similarly rapid, but the fiscal packages were much smaller. On average, fiscal stimulus measures amounted to 2.3 per cent of GDP in these countries, which reflects their more constrained fiscal environment.³¹ On the whole, the measures they adopted account for just 2.5 per cent of the global fiscal stimulus (figure 9). Their rather limited resources tended to be used to support vulnerable businesses, fund payment deferrals and provide emergency relief for the most vulnerable groups through non-contributory cash transfers (mainly special allowances and grants), in-kind support and public works programmes. Despite these efforts, the limited coverage of unemployment benefits and other forms of social protection schemes have made it more challenging to effectively contain the damage in emerging and developing countries, particularly for workers and households relying on the informal economy.

In many low-income countries, the situation is even more challenging because fiscal space is extremely limited, as shown in figure 9. This fiscal capacity has been further eroded by a sharp decline in commodity prices, export earnings, remittances and foreign investment. Without large-scale international support, stimulating the economy and employment through fiscal measures will be beyond the reach of many of these countries.

As for **monetary measures**, many emerging and developing economies have the scope for reducing interest rates further, but additional efforts to find sustainable and effective ways of mobilizing resources are needed, given the limitations of monetary policy transmission in these countries.

The large scale of the interventions and the urgency of delivery posed a number of implementation challenges for countries in all regions and income groups.

In general, delivery was smoother where it could rely on existing strong institutional mechanisms, such as well-developed and well-resourced social protection systems, efficient tax administration, a well-capitalized banking sector and strong public investment banks. Some countries adapted existing systems in order to introduce innovations, including new work-sharing schemes, the extension of support to the self-employed and conditionality clauses for the disbursement of funds and guarantees.

Many countries have been able to react quickly by mobilizing, expanding and adapting existing social protection mechanisms. According to the “ILO Social Protection Monitor on COVID-19”,³² as at 16 June, a total of 200 countries and territories had announced 1,166 social protection measures in various policy areas, including measures for health and income protection, unemployment protection and job protection.

Innovative approaches have helped to ensure timely and effective delivery in both advanced and developing countries. For instance, digital technology and mobile phones were used extensively in many countries for the registration and payment of social protection benefits.³³ Some developing countries (e.g. Ghana and Nigeria) set up special relief mechanisms to channel international donor funds and remittances specifically to the most vulnerable population groups. The use of tax waivers and deferrals helped to get resources quickly to households and businesses. In addition, some countries and cities provided households with cash transfers in the form of digital consumption vouchers (to discourage their use for savings or debt repayments), or offered travel vouchers for use in local restaurants (e.g. Japan and the Republic of Korea).

Key challenges ahead

Despite the extraordinary and often unprecedented measures introduced around the world, the damage done by the COVID-19 crisis to labour markets is enormous and leaves policymakers to confront major policy challenges. Actual labour market outcomes for the rest of 2020 and beyond will depend on the choices they make, as well as on the pandemic’s future trajectory. Moreover, the decisions taken in the near future are likely to have long-lasting implications for the world of work.

Countries will not all face the same situation. The gravity of the issues they must resolve and the tools and resources that they can bring to the task will vary considerably. But a number of key challenges will have to be addressed by most, if not all, of them.

First, finding the right balance and sequence of health and economic and social policy interventions to produce optimal sustainable labour market outcomes. From the onset of the pandemic, priority has had to be given, with varying degrees of success, to containing and eliminating the

31 See Pragyan Deb et al., “[The Economic Effects of COVID-19 Containment Measures](#)”, *Covid Economics, Vetted and Real-Time Papers* 19 (18 May 2020): 53–86 and 24 (1 June 2020): 32–75.

32 ILO, “[ILO Social Protection Monitor on COVID-19](#)”.

33 ILO, [Social Protection Responses to the COVID-19 Pandemic in Developing Countries: Strengthening Resilience by Building Universal Social Protection](#), May 2020.

spread of the virus. While this has had major economic and social costs, it is the necessary precondition for sustainable recovery. Nevertheless, policymakers are increasingly called upon to make tough calls about the timing of the reopening of workplaces, the health protocols to be observed in them, and the continuation, or not, of support to enterprises and workers that are unable to resume normal activities. Such decisions are made all the more difficult by the costs to the State and to private actors of the prolongation of restrictions, the concern that premature action could precipitate a second wave of the pandemic, and the increasing pressure of public opinion.

Secondly, implementing and sustaining policy interventions on the necessary scale at a time when resources are increasingly constrained.

General acknowledgement of the need to do “whatever it takes” to sustain economic activity, jobs, enterprises and incomes in the course of the pandemic has led governments to set aside prior fiscal and monetary targets. Many countries will be faced with high levels of debt and highly constrained monetary policy options even if the pandemic recedes in the coming months. The lasting damage inflicted on labour markets, and the difficult global economic conditions that will prevail, indicate that supportive policies would need to be maintained to sustain recovery, but this will be in a context of unprecedented fiscal and monetary conditions. Premature fiscal consolidation, such as that which followed the financial crisis of 2008–09, would risk destabilizing already weak labour markets.

Thirdly, supporting vulnerable and hard-hit groups, and generating fairer labour market outcomes.

The pandemic has laid bare some of the worst deficits and inequities of the world of work and made them worse. Women, young people and informal workers were all severely disadvantaged before the onset of the crisis, and they are among those who have suffered some of its most severe consequences. Similarly, public opinion has been awakened to the often difficult and undervalued work of groups of the labour force – notably health and care workers, cleaners and domestic workers – whose contribution has been, and remains, essential to overcoming the pandemic. Unless explicit attention is paid to improving the position of the most disadvantaged and vulnerable, the recovery processes could aggravate existing injustices.

Fourthly, securing international solidarity and support especially for emerging and developing countries. Whatever the achievements of countries individually, the overall response to the global COVID-19 crisis has been characterized by a marked deficit of international cooperation. The evidence

presented in this edition of the *ILO Monitor* shows that the enormous volume of resources deployed by high-income countries to combat the pandemic has simply not been available to others. This has a major impact on the capacity of developing and emerging countries to protect their citizens and curb the pandemic, which, in turn, will impair the prospects for all countries. The rhetoric of the need for a global response to the global crisis of COVID-19 needs to be translated into concrete measures to assist countries with limited fiscal space, in particular through multilateral action to deliver concessional finance and debt relief.

Fifthly, strengthening social dialogue and respect for rights at work.

In many cases, social dialogue – bringing together governments, employers and workers – has proved its worth in shaping effective, balanced and acceptable policy responses at the sectoral and national level. Social dialogue can likewise help to shape sustainable recovery paths in the period ahead. People in most countries have been subject to far-reaching restrictions on their personal freedoms during the pandemic, which has generally been considered necessary and legitimate. However, such acceptance depends on them being proportionate, appropriate and limited in time. The COVID-19 pandemic provides no justification for any restrictions on fundamental rights at work, as enshrined in international labour standards, and upholding these rights fully is a precondition for effective social dialogue.

Building a better future of work

Before the pandemic, **the international community had already committed to far-reaching, transformative changes to global development processes and to the world of work by adopting the United Nations 2030 Agenda for Sustainable Development and the ILO Centenary Declaration for the Future of Work**, respectively.

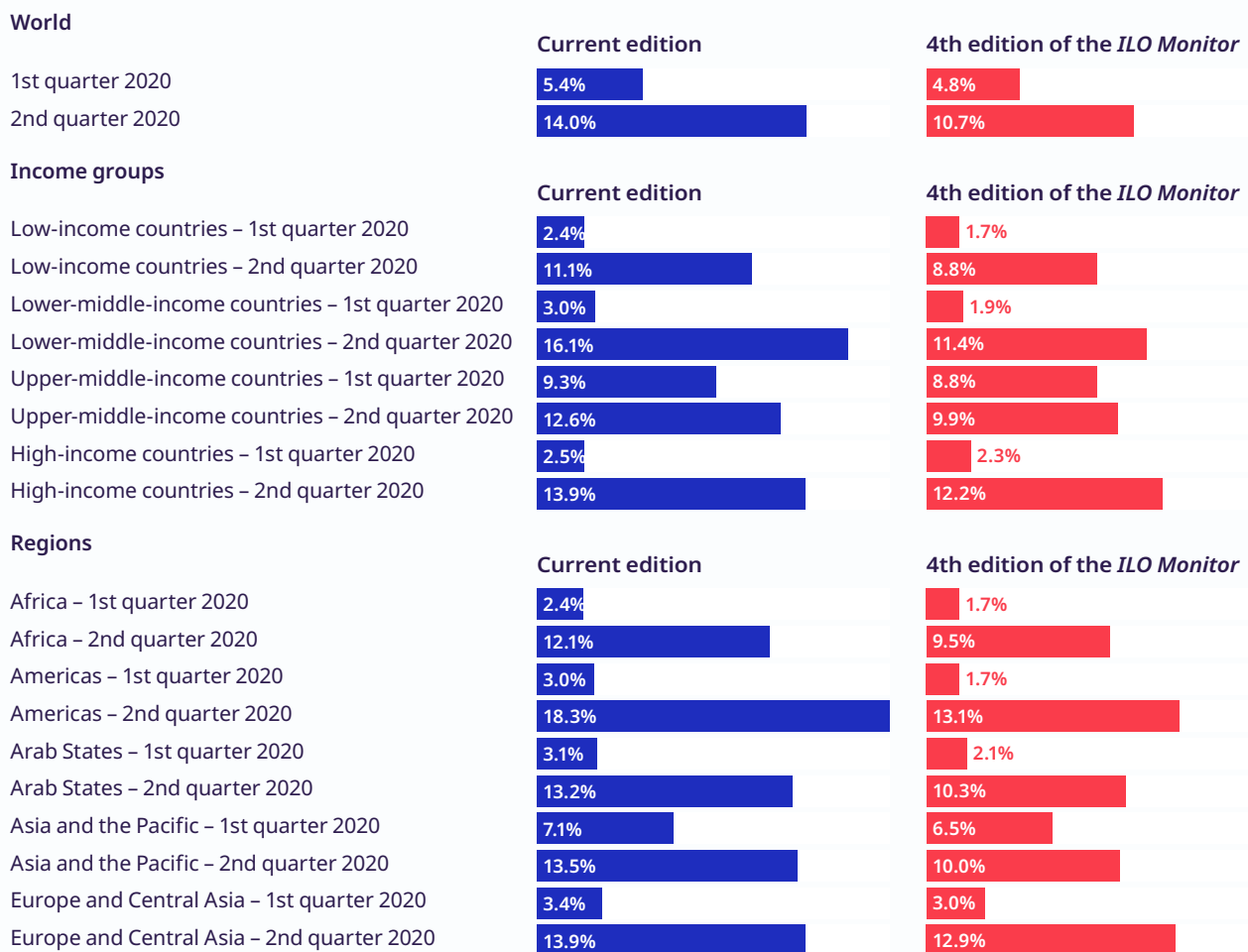
The world will emerge from the pandemic with higher levels of unemployment, inequality, poverty, debt and political frustration. This makes it all the more important that, **individually and collectively, governments make the ambition of “building back better”** – as opposed to building back to where we previously were – a central tenet of their recovery plans.

In this regard, **the ILO Centenary Declaration sets out a human-centred agenda for the future of work** involving investment in people’s capabilities, the institutions of work, and the sustainable jobs of the future, which provides important reference points for tackling the key challenges that lie ahead.

► Statistical annexes

Annex 1. Estimating working-hour losses

► **Figure A1. Revisions to estimates of working-hour losses**



Source: ILO nowcasting model (see Technical Annex 1).

► Technical annexes

Annex 1. Working-hour losses: The ILO's nowcasting model

The ILO has continued to monitor the labour market impacts of the COVID-19 crisis using its “nowcasting” model. This is a data-driven statistical prediction model that provides a real-time measure of the state of the labour market, drawing on real-time economic and labour market data. In other words, no scenario is specifically defined for the unfolding of the crisis; rather, the information embedded in the real-time data implicitly defines such a scenario. The target variable of the ILO nowcasting model is hours worked³⁴ – more precisely, the decline in hours worked that can be attributed to the outbreak of COVID-19. To estimate this decline, a fixed reference period is set as the baseline, namely, the fourth quarter of 2019 (seasonally adjusted). The model produces an estimate of the decline in hours worked during the first and second quarters of 2020 relative to the baseline. (Hence, the figures reported should not be interpreted as quarterly or inter-annual growth rates.) In addition, to compute the full-time employment (FTE) equivalents of the percentage decreases in working hours, a benchmark of weekly hours worked before the COVID-19 crisis is used.

For this edition of the *ILO Monitor*, the information available to track developments in the labour market has increased substantially. In particular, the following data sources have been incorporated into the model: labour force survey data for the first quarter and for April and May 2020; and administrative data on the labour market (e.g. registered unemployment and up-to-date mobile phone data from Google Community Mobility Reports). Additionally, the most recent Google Trends data and COVID-19 Government Response Stringency Index (hereafter “Oxford Stringency Index”) values, along with data on the incidence of COVID-19, have been used in the estimates. The modelling itself was carried out over several days. The results were finalized on 17 June, with the latest data update spanning the period from 10 to 15 June 2020 depending on the source. Principal component analysis was used to model the relationship of these variables with hours worked. Drawing on available real-time data, the modelling team estimated the historical statistical relationship between these indicators and hours worked, and used the resulting coefficients to predict how hours worked will change in response to the most recent observed values of the nowcasting indicators. Multiple candidate relationships were evaluated on the basis of their prediction accuracy and performance around turning points to construct a weighted average nowcast. For countries for which high-frequency data on economic activity were available, but either data on the target variable itself were not available or the above methodology did not work well, the coefficients estimated and data from the panel of countries were used to produce an estimate. The results are based on high-frequency economic and labour market data for 46 countries.

An indirect approach was applied for the remaining countries: this involves extrapolating the relative hours lost from countries with direct nowcasts. The basis for this extrapolation was the observed mobility decline from the Google Community Mobility Reports³⁵ and the Oxford Stringency Index, since countries with comparable drops in mobility and similarly stringent restrictions are likely to experience a similar decline in hours worked. From the Google Community Mobility Reports, an average of the workplace and retail & recreation indices was used. The stringency and mobility indices were combined into a single variable³⁶ using principal component analysis. Additionally, for countries without data on restrictions, mobility data, if available, and up-to-date data on the incidence of COVID-19 were used to extrapolate the impact on hours worked. Because of countries’ different practices in counting cases, the more homogenous concept of deceased patients was used as a proxy of the extent of the pandemic. The variable was computed at an equivalent monthly frequency, but the data were updated daily, the source being the European Centre for Disease Prevention and Control. Finally, for a small number of countries with no readily available data at the estimation time, the regional average was used to impute the target variable. Table A1 summarizes the information and statistical approach used to estimate the target variable for each country.

34 Hours actually worked in the main job.

35 Adding mobility decline as a variable makes it possible to strengthen the extrapolation of results to countries with more limited data. The Google Community Mobility Reports are used alongside the Oxford Stringency Index to account for differential implementation of containment measures. This variable has only partial coverage for the first quarter, and so for the estimates for that quarter only the stringency and COVID-19 incidence data are used. The data source is available at: <https://www.google.com/covid19/mobility/>.

36 Missing mobility observations were imputed on the basis of stringency.

► **Table A1. Approaches used to estimate working-hour losses**

Approach	Data used	Reference area
Nowcasting based on high-frequency economic data (direct or panel approach)	High-frequency economic data, including: labour force survey data; administrative register labour market data; Purchasing Managers Index (country or group); Google Trends data; consumer and business confidence surveys	Argentina, Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, China, Colombia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Lithuania, Luxembourg, Malaysia, Mexico, Netherlands, New Zealand, North Macedonia, Philippines, Poland, Portugal, Republic of Korea, Romania, Russian Federation, Serbia, Singapore, Slovakia, Slovenia, South Africa, Spain, Turkey, United Kingdom, United States, Viet Nam
Extrapolation based on mobility and containment measures	Google Community Mobility Reports (Q2 only) and/or Oxford Stringency Index	Afghanistan, Albania, Algeria, Angola, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belize, Benin, Bhutan, Bolivia (Plurinational State of), Bosnia and Herzegovina, Botswana, Brunei Darussalam, Burkina Faso, Burundi, Cabo Verde, Cambodia, Cameroon, Central African Republic, Chad, Chile, Congo, Costa Rica, Croatia, Cuba, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Dominican Republic, Ecuador, Egypt, El Salvador, Eritrea, Eswatini, Ethiopia, Fiji, Gabon, Gambia, Georgia, Ghana, Guam, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong (China), India, Indonesia, Iran (Islamic Republic of), Iraq, Jamaica, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Lao People's Democratic Republic, Latvia, Lebanon, Lesotho, Liberia, Libya, Macao (China), Madagascar, Malawi, Mali, Malta, Mauritania, Mauritius, Mongolia, Morocco, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Nigeria, Norway, Occupied Palestinian Territory, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Puerto Rico, Qatar, Republic of Moldova, Rwanda, Saudi Arabia, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, Sri Lanka, Sudan, Suriname, Sweden, Switzerland, Syrian Arab Republic, Tanzania (United Republic of), Tajikistan, Thailand, Timor-Leste, Togo, Trinidad and Tobago, Tunisia, Turkmenistan, Uganda, Ukraine, United Arab Emirates, Uruguay, Uzbekistan, Venezuela (Bolivarian Republic of), Yemen, Zambia, Zimbabwe
Extrapolation based on the incidence of COVID-19	COVID-19 incidence proxy, detailed subregion	Armenia, Comoros, Equatorial Guinea, French Polynesia, Maldives, Montenegro, New Caledonia, Saint Lucia, Saint Vincent and the Grenadines, Sao Tome and Principe, United States Virgin Islands
Extrapolation based on region	Detailed subregion	Channel Islands, Democratic People's Republic of Korea, Samoa, Tonga, Vanuatu, Western Sahara

Notes: (1) The reference areas included correspond to the countries and territories for which ILO modelled estimates are produced. (2) Countries and territories are classified according to the type of approach used for Q2. (3) When modelling the impact for China during Q1, the dependent variable of the regression (hours lost) and the Google Trends data for the countries that are available from Q2 were used to extrapolate the result for that country. This is because the extrapolation needs to be performed for a quarter in which, on average, the target country is affected to a significant extent. Additionally, given that no new information for China during Q1 has become available since the fourth edition of the *ILO Monitor*, the estimate for Q1 has not been updated. For China during Q2, the same approach was applied: up-to-date Oxford Stringency Index and Purchasing Managers Index data were used; however, Google Trends data were not, because they did not present sufficient cross-country explanatory power. For Mexico, the results from the Encuesta Telefónica de Ocupación y Empleo (Occupation and Employment Telephone Survey), conducted in April 2020, were used; they were benchmarked against April 2019 data. For the Philippines, the ad hoc release of the April 2020 Labor Force Survey was used; the data were benchmarked against April 2019 data. Lastly, for Brazil, data from the "PNAD-COVID" survey (PNAD = Pesquisa Nacional por Amostra de Domicílio Contínua [Continuous National Household Sample Survey]), conducted in May 2020, were used (benchmarked against the rolling three-month average for April, May and June 2019). With the data from the PNAD-COVID survey it is currently not possible to compute the drop in working hours due to shorter hours. Analysis of countries in a similar situation suggests a small but variable role for this channel. Consequently, the data for Brazil were inputted into the model assuming no decline in hours for those who are employed and at work, leading to a moderate underestimation of the hours lost in that country.

Because of the exceptional situation, including the scarcity of relevant data, the estimates are subject to a substantial degree of uncertainty. The unprecedented labour market shock created by the COVID-19 pandemic is difficult to assess by benchmarking against historical data. For instance, an emerging pattern – unusual by historical standards – is an above-average reduction of hours worked in developing countries, as discussed in the main text and in Technical Annex 2. This implies a strong downward risk for global work activity; therefore, if the pattern is confirmed to be persistent and to affect a substantial number of additional developing countries, future revisions will be necessary. This is likely to lead to an increase in the global estimate of hours lost. Furthermore, at the time of estimation, consistent time series of readily available and timely high-frequency indicators, including labour force survey data, remained scarce. These limitations result in a high overall degree of uncertainty. For these reasons, the estimates are being regularly updated and revised by the ILO. The table on the previous page summarizes the approach used for each country and territory.

Annex 2. The labour market impact of COVID-19 in the developing world: Evidence from the latest available labour force surveys

The COVID-19 crisis has had a major impact on the global economy since early on in the first quarter of 2020, yet internationally comparable data that allow one to measure its labour market effects have been limited to a small sample of developed countries. The present edition of the *ILO Monitor* incorporates, for the first time, labour force data from developing countries that were recently made publicly available and that capture the impact of the crisis on these countries' labour markets.

Nationally representative labour force survey data, covering a period during which strict containment measures were implemented, have been published for four developing countries: Brazil (fieldwork in May), Colombia (fieldwork in April), Mexico (fieldwork in April) and the Philippines (fieldwork from mid-April to mid-May). In addition, Peru published similar data for its capital, Lima, and the surrounding metropolitan area (fieldwork in April). These data, albeit scarce and regionally concentrated, constitute the first internationally comparable data set derived from official statistics that provides evidence of the labour market impact of the COVID-19 crisis in the developing world.

The new data indicate a significant decrease in work activity in the developing world. Contrary to what one would expect from historical experience, the hours worked seem to have dropped more sharply in developing countries than in developed countries during the current crisis – at least among the countries for which data are available. If one focuses on hours worked in the main job, the monthly decline in hours worked (relative to the previous comparable period) exceeded 50 per cent in Colombia and was almost 60 per cent in the Philippines. For Mexico, the decline was close to 40 per cent, while the publicly available data for Brazil allow one to infer a lower bound of close to 25 per cent. The geographically limited survey from Peru suggests an even larger decline (close to 80 per cent), but this may be due to urban areas being substantially more affected by containment measures. An index of national production for Peru suggests a drop of roughly 40 per cent in April.

By contrast, the April data for Canada and the United States show a decline in hours worked of close to 30 and 20 per cent, respectively, while data for the United Kingdom from the last week of March (when strict containment measures were already in place) indicate a decline of roughly 25 per cent. There are numerous possible reasons for the above-mentioned pattern. For example, telework is not an option for occupations that account for a large share of employment in the developing world. Similarly, informal employment may present a greater vulnerability to confinement measures.

Although the new labour force survey data provide an informative early view of the impact of the COVID-19 crisis on key labour markets in the developing world, they are too scant to allow any firm conclusions to be drawn. The sample of available countries is small and not regionally representative; it includes some countries with extremely strict containment measures and presents, on the whole, a relatively low agricultural employment share. Additionally, labour force survey operations have been affected by the pandemic, including the methods for data collection (with e.g. telephone interviews being used instead of face-to-face interviews). In fact, the available data for Brazil and Mexico come not from these countries' regular surveys but, rather, from an ad hoc data collection exercise. Another key issue to bear in mind is whether the enforcement of confinement measures can affect responses to labour force surveys (e.g. respondents reporting that no work was performed if the activity they had undertaken was prohibited as part of the lockdown).

These new data are in general highly informative, and they have therefore been included in the ILO nowcasting model. Together with new high-frequency data that confirm further economic weakness, this has led to a substantial upward revision of the estimate of hours lost in the second quarter of 2020. Further revisions are to be expected as additional information becomes available.

Annex 3. Decomposition of working-hour losses

The source of the necessary data for the decomposition of working-hour losses is the ILO Microdata Repository. This unique repository includes labour force survey data for the United States (April 2020), Canada (April 2020), the Republic of Korea (April 2020), the United Kingdom (last week of March 2020), Peru (April 2020; only for Lima and its metropolitan area). Although microdata for April are not available from Mexico, the country’s National Institute of Statistics and Geography has published the detailed results of an ad hoc survey conducted in April 2020 to assess the impact of the COVID-19 crisis. As a benchmark period before the crisis, the corresponding calendar period in 2019 is used to avoid seasonal effects. The only exception is Canada, for which April 2018 data are used, because the 2019 observation was heavily influenced by a seasonal pattern. Even though labour force survey data are generally internationally comparable, there continue to be differences between countries’ statistical practices. Given the exceptional economic period covered by the analysis, these differences can affect the results.

The following variables are represented by their corresponding symbol:

Represented variable (at time t)	Symbol
Total hours worked	H^t
Employed population	E^t
Average hours worked	$h^t = H^t / E^t$
Inactive population	I^t
Unemployed population	U^t
Employed population not working	$ENAW^t$
Employed population at work	EAW^t
Average hours per person employed at work	$\tilde{h}^t = H^t / EAW^t$

Notes: (1) Applying the difference operator Δ to a variable X at time t is equivalent to the change in the variable compared to the past value: $\Delta X^t = X^t - X^{t-1}$.
 (2) In the current analysis, hours worked refer to total hours actually worked in the main job.

The analysis in the main text requires the decomposition of the working-hour loss into four components. Using the notation outlined in the table above, the decomposition can be expressed as:

$$\frac{-\Delta H^t}{\text{Hour loss}} = \left(\underbrace{-\Delta E^t \cdot h^{t-1} \cdot \frac{\max\{\Delta I^t, 0\}}{\Delta U^t + \Delta I^t}}_{\text{Job loss to inactivity}} - \underbrace{\Delta E^t \cdot h^{t-1} \cdot \frac{\max\{\Delta U^t, 0\}}{\Delta U^t + \Delta I^t}}_{\text{Job loss to unemployment}} - \underbrace{E^t \cdot \tilde{h}^{t-1} \max\left\{\frac{ENAW^{t-1}}{E^{t-1}} - \frac{ENAW^t}{E^t}, 0\right\}}_{\text{Employed but not working}} \right. \\ \left. - \underbrace{EAW^t \max\{(\tilde{h}^t - \tilde{h}^{t-1}), 0\}}_{\text{Shorter hours}} \right) \cdot N$$

With N being a normalization coefficient:

$$N = \frac{-\Delta E^t \cdot h^{t-1} \cdot \frac{\Delta I^t}{\Delta U^t + \Delta I^t} - \Delta E^t \cdot h^{t-1} \cdot \frac{\Delta U^t}{\Delta U^t + \Delta I^t} - E^t \cdot \tilde{h}^{t-1} \left(\frac{ENAW^{t-1}}{E^{t-1}} - \frac{ENAW^t}{E^t} \right) - EAW^t (\tilde{h}^t - \tilde{h}^{t-1})}{-\Delta E^t \cdot h^{t-1} \cdot \frac{\max\{\Delta I^t, 0\}}{\Delta U^t + \Delta I^t} - \Delta E^t \cdot h^{t-1} \cdot \frac{\max\{\Delta U^t, 0\}}{\Delta U^t + \Delta I^t} - E^t \cdot \tilde{h}^{t-1} \max\left\{\frac{ENAW^{t-1}}{E^{t-1}} - \frac{ENAW^t}{E^t}, 0\right\} - EAW^t \max\{(\tilde{h}^t - \tilde{h}^{t-1}), 0\}}$$

The negative signs in front of the terms are used to indicate that each term is a loss (positive) instead of a decrease (negative). The maximum operator is used in each term to avoid negative contributions from any of the components, which in the context of the current exercise would not be economically intuitive. If one of the components cannot explain any of the decline in hours, it is set to a null contribution. In order to make sure that the decomposition holds in the case that some of the negative contributions are set to zero, a coefficient to compensate the difference, N , is necessary. This is akin to renormalizing on the basis of the positive components. Whereas the decomposition holds arithmetically by construction, the interpretation of the decomposition relies on

several assumptions. Two key assumptions have to be made when interpreting the decomposition, because labour force survey microdata are derived from a cross-section of individuals, rather than from a panel structure. First, all the change in the target variables over the reference period is assumed to be a consequence of the COVID-19 crisis. Secondly, the loss of hours attributed to job loss leading to unemployment, job loss leading to inactivity, and to people being employed but not working is assumed to be proportional to the change in the number of people affected. This is equivalent to assuming that, on average, those who became unemployed or inactive or whose jobs were suspended owing to the COVID-19 crisis had been working the same number of hours before the crisis.

Annex 4. Forecasts for the second half of 2020

The ILO has developed a projection model to forecast hours worked for the second half of 2020. The variable of interest is the average number of hours worked per person in the working-age population, as in the nowcasting model. The model specifies that the change in the number of hours is a function of the gap in the number of hours worked with regard to a long-term trend of the growth of GDP and its lag, and that this change is an indicator of being in a recovery period (see equation 1 below).

$$\Delta h_{(i,t)} = \beta_{(0,i)} + \beta_{(1,i)} \text{gap}_{(i,t)} + \beta_{(2,i)} \Delta \text{GDP}_{(i,t)} + \beta_{(3,i)} \Delta \text{GDP}_{(i,t-1)} + \beta_{(4)} \text{Recovery}_{(i,t)} \quad (1)$$

The model is run using multilevel mixed-effects methods, meaning that the distribution of the slope parameters for the gap and GDP growth is also estimated. This makes it possible to retrieve the country-specific random effects so that for every country we obtain specific deviations of the coefficients around the central coefficient estimated for the panel. To forecast for the third and fourth quarters of 2020, we need to set up the model on the basis of a quarterly frequency. Using a sample of 52 countries with available data at the quarterly frequency, we estimate the coefficients of equation (1) and the corresponding country-specific random effects. Moreover, we also estimate equation (1) using the full sample of countries at the annual frequency to extract the country-specific random effects, which we then apply to the central coefficients, estimated before using quarterly data, to obtain country-specific coefficients for all countries. For the coefficient indicating the presence of a recovery period ($\beta_{(4)}$), no random effect could be estimated: it is therefore the same for all countries.

The gap in the number of hours towards a long-run trend is estimated by fitting a long-run trend of hours worked using a Butterworth time-series filter. We also estimate the speed of adjustment of the long-run trend to new observations of hours worked, and apply that adjustment to project the evolution of the long-run trend in our scenarios. As the crisis continues, the implicit target for closing the gap is adjusted downwards slightly.

The baseline scenario of quarterly GDP growth is taken from the OECD and the Economist Intelligence Unit databases. For other countries without available quarterly growth projections, a path of GDP during the year 2020 is estimated that is consistent with (a) the estimated loss of hours in the first and second quarters, (b) the relative path in countries with available data and (c) the annual economic growth projection from the International Monetary Fund's World Economic Outlook database, April 2020.

In addition to the baseline scenario, two alternative scenarios are used in the modelling. The pessimistic scenario reflects the analysis conducted for the June 2020 issue of the *OECD Economic Outlook*, in which the resurgence of COVID-19 in the fourth quarter of 2020 necessitates a second wave of economic restrictions. The scenario is modelled by assuming a loss in hours in the fourth quarter in relation to the loss in the second quarter that is proportional to the relative loss of GDP, as estimated by the OECD. Furthermore, the average negative GDP shock estimated by the OECD for the fourth quarter is also applied to the non-OECD countries.

For the optimistic scenario, the underlying assumption is that workers return quickly to their activity despite the continuing output gap. Such a job-driven recovery will boost demand and create further employment. We model this by increasing the coefficient $\beta_{(1)}$, which dictates how strongly hours worked react to the gap towards the long-run trend, since that parameter has been estimated from historical data where actual demand deficiencies reduce labour demand. Specifically, we assume that this parameter is within the upper 5 per cent of the estimated distribution, instead of the mean of the distribution that is used in the baseline scenario.

As the current situation is unprecedented, a large number of uncertainties surround the projections presented in this edition of the *ILO Monitor*. The second-wave scenario illustrates the external uncertainties. Besides, there is the model-internal uncertainty that arises even if events were to unfold as assumed for the baseline scenario because the situation is unique. We tried to capture this by conducting many simulations where we randomized the parameters of equation (1) using the estimated distributions for each country and then computed the percentiles for the different outcomes.